

REENGINEERING REFORM

ADOPTING A NEW APPROACH TO AN OLD PROBLEM

**REPORT OF THE NEW YORK CITY COUNCIL
COMMISSION ON THE CAMPAIGN FOR FISCAL EQUITY
PART II**

**David Jones
Arthur Levine
Co-Chairs**

**Anthony Alvarado
Executive Director**

October 2005

EARLY EDUCATION FOR ALL CHILDREN

Research establishes that early education is critical for children's learning and achievement. Studies show that, by providing the essential cognitive, sensory-motor and social-emotional skills necessary for school success and adult productivity, children's earliest educational experiences set the stage for all subsequent learning.²²³ This hard evidence spurred passage of New York's landmark 1997 Universal Prekindergarten (UPK) law, which envisions public preschool services made available for all of New York's four-year-olds.

We now know that 75 percent of a child's brain develops before the age of five. During the first three years, growth takes place at breakneck speed, resulting in the creation of more than a trillion pathways for learning and development. In the preschool years, as learning occurs the brain parses and prunes these pathways, setting the literal foundations for later learning. Thus the preschool years provide a critical window of opportunity for intervention, for children to gain the literacy, cognitive and social skills that will guide them through life.²²⁴

The benefits of early education for children from disadvantaged backgrounds, or otherwise at risk of school failure, are well documented. Without prekindergarten, more than half of all low-income children start kindergarten a grade or even two grades behind. These children do not enter kindergarten with the vocabulary and other verbal skills necessary to reason, problem-solve and learn to read and write. This point was emphasized in the 1998 landmark *Abbott* decision, in which New Jersey's Supreme Court, stating that "early childhood programs are critically important and address the fact that if at-risk children are to have any chance of achieving academic success, they must be education-ready," ordered school officials to offer preschool services to three- and four-year-olds across the state.²²⁵

Early education programs that benefit children also benefit society. Studies on the economic benefits of early education demonstrate that high quality preschool provides a tremendous return on investment, in part because of the reduced need for remedial and special education services. A modest estimate is that every dollar paid generates a four-dollar return to the taxpayer.²²⁶ A recent study on the Perry Preschool project, the best known and best-documented study of the value of pre-school education, documents a 17 to 1 rate of return.²²⁷

Direct benefits to the school system include reduced grade retention, fewer placements in special education and greater classroom productivity. An evaluation of New York State's 40-year-old Targeted Prekindergarten program (TPK)²²⁸ for low-income children found that participating children were 50 percent less likely to need special education services, and 25 percent less likely to be held back by the end of the third grade than peers who did not attend preschool.²²⁹ One education economist estimates that the school system saves one half of its investment in early education even before the other benefits are accounted for. Under that equation, New York State could save 1.9 to 2.8 percent on total educational expenditures, or **up to \$828 million a year**, by investing in universal preschool for all four-year-olds.²³⁰

The benefits of early learning cut across all social and economic classes. The tuition costs of early education, which typically range from \$6,000 to \$12,000 a year in New York City, make it prohibitively expensive for even middle-income families. The result is a learning gap affecting middle-income children — particularly those from families in the lower portion of middle income — who often start school unprepared to learn.²³¹ According to some observers, principals and teachers across the system can immediately tell which children have been through a universal prekindergarten (UPK) program and which have not; the former group is far more prepared for formal instruction in the early grades than the latter group.²³²

Scientists have also documented the critical need to add early education services for children aged three and younger. Edward Zigler, a prominent researcher at Yale University, recommends that policymakers define preschool as services for birth through age five, citing the scientific evidence that considerable development occurs during the earliest years of human life, from birth through age three. The research demonstrates that intervention before the age of three can catch developmental delays in speech, cognition or physical ability, before they grow more costly and complicated to treat.²³³ Researchers have conducted evaluations of various programs, and initial research shows the Early Head Start program to be an effective model, lifting children’s development across all the important early learning domains, and boosting children’s readiness for school.

The research supporting early childhood education starting from birth has caught the attention of statewide officials. The state of Illinois now requires that all expansion of prekindergarten services be coupled with an expansion of supports for infants and toddlers.²³⁴ On July 7, 2005, New York’s Board of Regents circulated a draft of a revised early childhood policy calling for state support for programs that start at birth.

“Early childhood education, for all children ages birth through grade 3, is an integrated system designed to ensure that each child receives a healthy start and attains the skills and concepts to have a successful academic experience in developmentally-appropriate programs.”

—New York Board of Regents, *Policy Statement on Early Education for Student Achievement in a Global Community*, (2005)

History and Framework of Early Education in New York City

Superstart

In 1965, the New York State Education Department launched the first statewide public preschool initiative, called “Experimental Preschool”, which targeted three- and four-year-olds at risk of school failure. The State Board of Regents initiated the program. During the program’s first year \$5 million in funding was allocated (to serve 2,600 children across the state) through

the Governor's executive budget. To be eligible, children had to be economically disadvantaged (i.e., qualify for free or reduced-price lunch). The program was housed entirely within public school buildings, and took place for six hours a day. The explicit purpose of Experimental Preschool was to prepare children to succeed in school.

Two years after the launch of this program, the state Board of Regents issued a policy paper proposing that the state "adopt a long-term plan leading to the establishment of free education for all 3- and 4-year-olds whose parents wish them to attend school".²³⁵ That proposal never took hold, but the Experimental Preschool program survives to this day, serving about 5,500 children in New York City's public schools. Today, the state calls the program Targeted Prekindergarten, and it continues to fully fund a six-hour day for students. In New York City, that program is known as "Superstart." New York City combines federal and state funding to create a full school day program.

Universal Prekindergarten (UPK)

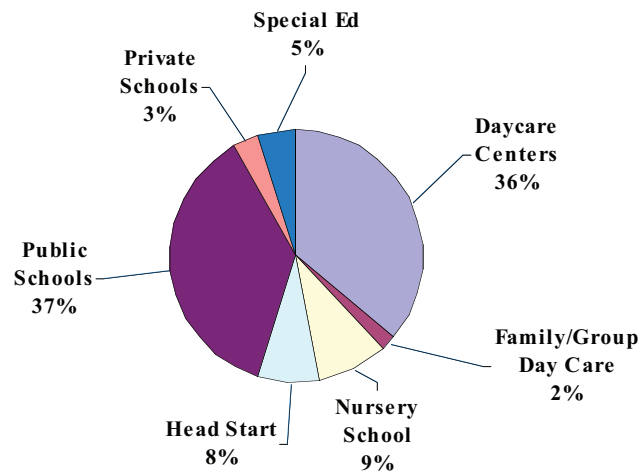
In 1997, the legislature expanded preschool services with passage of the Universal Prekindergarten law (UPK). This legislation authorizes local school districts to provide access to a two and a half hour preschool experience for four-year-old children residing in their catchment areas at no cost to their families. The legislation also mandated that at least 10 percent of the program funds for collaborations be earmarked for community-based programs in non-public school settings. The law also expands eligibility, defining all children as eligible regardless of whether they were enrolled in another preschool program such as childcare or Head Start.²³⁶ Thus, a child might attend both a Head Start or childcare program as well as a two and a half hour UPK program every day.

The goal was to ensure access to high-quality early learning programs for all four-year-olds whose parents wished them to participate. The legislature decided to roll out the program gradually over five years, with full funding at \$500 million in 2003. Funding stalled in 2001, however, keeping enrollment flat. Sixty thousand children are currently enrolled statewide in this program; nearly 42,000 of them are in New York City.

In New York City, the DOE through each of its community school districts administers the program. Of the 42,000 children enrolled, 15,000 are in public schools and the remaining 27,000 are in programs operated by nearly 600 community-based organizations (CBOs). These CBOs include childcare organizations, Head Start, nursery schools, preschool special education programs and private and parochial schools. Regardless of the settings, the programs must meet requirements set by the DOE for adult supervision, program and curriculum and teacher certification among others.

As indicated by the chart below, only 37 percent of children attended prekindergarten in public school buildings the first year of the program. These percentages have remained fairly consistent over the years.

Program Sites for UPK in New York City



In the first three years of implementation, while state funds continued to increase, the DOE used the UPK funding to greatly expand preschool services.* The City also used this time to develop the framework for a system that could serve all children across the City. Education officials did this despite uncertainties about what the yearly level of funding for this program would be. Success in this rapid expansion of early education benefited from the collaboration between the DOE and community-based organizations that already had a strong foundation and history of providing early education to four-year-olds.

In addition to UPK, the DOE oversees Preschool Special Education for three- to five-year-olds. Working with community providers of UPK, the DOE was also able to offer more opportunities for children identified with special needs to attend classes with a more diverse group of peers.

Other Non-DOE Programs

A diverse range of city, state and federal agencies administers educational and childcare programming for children under five.²³⁷ The *Administration for Children's Services Child Care Division* oversees publicly funded childcare services in centers and family childcare homes. The *Human Resources Administration* authorizes and distributes childcare vouchers, which can be

* Recognizing that a 2 ½ hour program was not sufficient to meet the educational needs of many children, the public schools and community-based providers worked creatively to blend UPK funding with other public and private resources to offer a full school day to the children and families who need it. The DOE reports that 20 percent of children receiving Universal PreK services are in full day programs.² These efforts to blend funding are similar to the strategies used in other states that engage community providers in public preschool programs.

used to pay for programs that include a UPK component. The *Department of Health* is responsible for Early Intervention Services for children age zero to three. The *Administration for Children Services* and the *US Department of Health and Human Services* oversee most of the City's Head Start programs.

There are close to 1,800 early childhood programs licensed by the New York City Department of Health. The vast majority of these programs enroll children between the ages of three to five, but some have spaces for younger children. About two-thirds offer full-day options.²³⁸ Of these, nearly 600 already offer UPK services for two and a half hours a day, mostly in combination with other services. The complexity of services and providers makes it difficult to create a coordinated system with unified standards ensuring that children receive the early learning experiences they deserve. The roles and responsibilities have evolved out of the laws that created each individual funding stream, resulting in a patchwork of oversight, different program funding levels and staff compensation levels that persist to the present day.

Since the advent of UPK, extensive work has been done to expand and improve services by combining funding streams to enhance early learning opportunities for the City's children.²³⁹ Preschool special education programs, for example, used UPK funds to expand the number of integrated classrooms, classrooms with both special education and non-special education students, and Head Start programs were able to expand services available to the poorest children. By this strategy, programs and services were improved.

The UPK legislation incorporated this collaborative, diverse delivery system. Studies continue to show that such a diverse delivery system reaches far more children, regardless of their parent's income or work status.²⁴⁰ Its benefits include increased access, increased capacity, continuity of service, and greater connections between the public school system and early education programs in the same community.²⁴¹

Financial Investment in DOE Prekindergarten Programs

The City now spends about \$205 million of city, state and federal monies annually in prekindergarten programs for approximately 46,000 children (UPK & TPK)²⁴². Based on the overall funding, the median cost per UPK student is \$4,456.

Funding for Universal PK (8/5/2004 DOE)²⁴³

	<i>State</i>	<i>City</i>	<i>Federal</i>
FY2005 TARGETED	\$ 20,713,000	\$ 2,127,000	\$19,994,000
UPK	\$147,081,000	\$15,741,000	
Total	\$167,794,000	\$17,868,000	\$19,994,000

CBOs and public schools both receive UPK funding to provide early education for two and a half hours a day and 180 days a year, but rates vary depending on the site. The DOE negotiates payments individually with each community-based agency. Public schools receive

funding based on the number of children to be served. CBOs on average are paid \$3,300 per child in UPK, which is about \$1,000 less than the median expenditure for services in all settings.²⁴⁴ The rate differential between the CBOs and the public schools makes it difficult for community-based programs to retrain certified teachers. In addition, UPK programs based in the community do not receive the dollars that their public school counterparts do to hire social workers and provide other institutional supports. The differential in rate translates into a loss of almost \$20,000 per classroom in CBOs, when compared to a public school site. UPK funding has not increased in three years. Ultimately, neither CBOs nor public schools can sustain this program without critical increases in funding and adjustments to make up the shortfall in funding.

The CFE Investment

To ensure that all New York City children, and particularly children in communities with a concentration of high-need and low-performing students, develop the early education skills and cognitive abilities critical for all subsequent learning and achievement, the Commission recommends the following:

- Full school day UPK programs for all four-year-olds;
- Full school day UPK programs for all three-year-olds in districts of high-need with low-performing schools;
- Pilot programs for children under three in the most at risk communities.

These recommendations will work to create a comprehensive approach to early education in which the needs of all children from birth to five are addressed.

The Commission's recommendations are for a full day of DOE-sponsored UPK, to be provided in both school and CBO sites. Our analysis assumes, as the current UPK law does, that all children will be eligible for early education services whether or not they are already enrolled in other early education services such as child care or Head Start. The CFE money will operate to supplement these other services, as needed, to provide children with the highest-quality educational opportunities.

Currently in New York City, there are approximately 110,000 four-year-olds and about the same number of three-year-olds.²⁴⁵ The Commission's recommendations and financial analysis are based on calculations that 64,000 of these four-year-olds and 19,150 of these three-year-olds will in fact enroll in these programs.²⁴⁶ Enrollment will continue to be voluntary as kindergarten is today.

RECOMMENDATION 2

Create full day UPK programs, utilizing the R&D framework to evaluate existing programs and scale-up new ones, for all four-year-olds citywide and all three-year-olds in communities with high-need and low-performing schools. Develop pilot programs for infants and toddlers in areas where there are schools with high-need and low-performing students.

Specifics

- Evaluate existing New York City prekindergarten programs through the Institute for Research and Accountability. The Institute will assess how well these programs prepare children to enter Kindergarten. The Institute will also determine whether and how prekindergarten programs meet the City’s learning goals, standards and expected outcomes in a variety of areas (e.g., instruction, professional development, curriculum, support services, teacher quality, facilities, assessment, administration) as well as detail where and how improvements need to be made.
- Develop, test and scale up, through the Lab District, a high quality prekindergarten model that will ensure that all children enter Kindergarten ready to learn. Scale up will occur at a rate that increases program capacity without significantly reducing program quality.
- Create up to five pilot programs for children under three. These pilots will be developed and tested by the Lab District. The Lab District will draw on the expertise of early childhood programs such as Early Head Start, as well as the DOE, representatives from higher education and other experts on infant-toddler development. Data and information gathered on the pilot program(s) by the Lab District will be used to design, test (and potentially) scale-up a comprehensive strategy for early education for all children in the City under the age of three.
- Convert half-day slots in high-need neighborhoods to full day-day slots first. Create additional full-day slots to reach full enrollment of eligible four-year-old children.
- Open classrooms for three-year-old children in communities with the highest need and lowest performing schools concomitantly with new classrooms for four-year-olds. The needs of three-year-olds are most urgent, and evidence shows these children will reap the greatest rewards from prekindergarten programming.
- Provide social work and family support services at all prekindergarten sites, regardless of whether they are set in public school or non-public school settings.*

Funding and Ensuring Quality Programming

The expansion of services to achieve universal access will require the creation of new full-day slots for approximately 22,000 four-year-olds. It will also require the conversion of another 33,600 half-day slots into full-day slots, with 64,000 four-year-old children ultimately

* These services are currently only provided in the public schools. The cost for this is included in the CBO funding model.

being served.²⁴⁷ These spaces should be provided by both public schools and CBOs according to their capacity levels. For purposes of costing out, however, the Commission assumes, based on historical trends, that 60 percent of this expansion will take place in CBOs and 40 percent in public schools. The Commission also speculates that most public schools will not have facilities appropriate to enroll three-year-olds. Given the smaller class sizes they require, the estimated cost is slightly higher for three-year-olds than four-year-olds.* Finally, a mix of other funding for child care and Head Start can be invested to establish extended day and year round services that working families need. The Commission’s cost estimates build from the current experience and the assumptions of the UPK legislation.

Extensive research has delineated the critical elements of a quality prekindergarten experience. Children in high quality programs are exposed to curricula whose aims are specified and integrated across domains. These children participate in activities that develop their cognitive, social, emotional and motor skills not in isolation, but together. Learning takes place through a combination of teacher-directed and child-directed activities that build on children’s literacy, language, mathematical and other capabilities. Children learn from teachers who are highly qualified, who are able to teach across domains as well as develop positive relationships with their students. Children are taught in classroom environments that are safe and nurturing, with a limited class size (18 children or less) and a lead teacher and assistant in the classroom.

The National Association for the Education of Young Children and other organizations have mapped out the elements of “developmentally-appropriate” practice to be used in the classroom, including the way the classroom should be organized and teachers should engage preschoolers to create a child-centered approach to learning. New and burgeoning literature on teacher mentoring and early literacy provides additional valuable information to policy-makers who wish to create the highest-quality preschool programs.²⁴⁸

Parental involvement is also an important element of a high quality UPK program. Parental involvement is central to effective educational outcomes for all children, but especially the youngest, for whom early education is a transition period from family to the larger community. To facilitate the active engagement of parents, programs should be respectful of their concerns and preferences as well as address their children’s social, mental and physical health. UPK programs should build capacity in coordination with communities, and solicit their input.

Finally, high quality UPK programs measure a continuum of performance in all domains, with progress evaluated against child and program baseline data. Programs themselves are measured on the quality of the learning environments they have created and the interactions between children and staff.

Experts have identified the important dimensions of early development and learning “readiness” and the conditions critical to support these dimensions.²⁴⁹ The DOE has used these dimensions to develop a set of program standards in each of the key developmental areas and to identify key indicators for assessing each child’s progress in each of the developmental areas.²⁵⁰

* See addenda to this report, Cost Estimates and Assumptions and Costs for Universal Prekindergarten, for details.

In terms of program content, New York City has adopted the strategy recommended by national early education experts. That is, while it lays out expectations, learning goals and expected outcomes, it does not mandate a single curriculum to be utilized in all prekindergarten settings. The DOE, with extensive input from early education programs throughout the community, has created a set of research-based prekindergarten standards for classrooms serving four-year-olds.²⁵¹ The DOE has also developed a program assessment tool that will enable its staff to monitor programs. Although this tool was field tested last year, it has not yet been evaluated for its reliability and validity. Finally, the DOE requires teachers in the public schools to complete an initial assessment for each child when they enroll in prekindergarten. CBOs, however, are not required to complete such assessments and it is not clear that in public schools such assessments are ongoing over the course of the child's enrollment.

These recent steps taken by the DOE demonstrate there is interest in developing high quality programs in New York City. However, they also demonstrate that the capacity to monitor, support and develop strong prekindergarten programs across the system has not been fully developed. Assessments, benchmarks and other tools that define quality and measure outcomes have been created. However, the City's prekindergarten programs vary widely in their quality; some programs have the capacity to use these tools properly, while others do not. Little is known about the quality of existing prekindergarten programs, and most importantly, how to develop quality and capacity in programs across the City.

The task of the Institute, therefore, will be to assess the existing prekindergarten programs in New York City. It will evaluate the quality of the services offered, the impact of these services on children's outcomes, and provide existing prekindergarten programs with information on what can be done to increase the quality of their services and outcomes.

UPK expansion must take into account the fact that too often it is the children in high-need communities (who could most benefit from high quality prekindergarten) who make do with just the opposite. Policymakers and educators frequently view the mere existence of prekindergarten programs as having an impact on early childhood education and student outcomes. **As with K-12 education, however, it is not the fact of the programs that matters as much as what they do and how well they do it.** The elements of a high quality program not only need to be put together, but maintained over time and developed flexibly and comprehensively enough to respond to the differing, multiple needs of all children in the program, including English Language Learners, special education students, and students who enter the prekindergarten program substantially behind their peers.

To address this issue, the Lab District will be responsible for 1) developing a model of a high quality prekindergarten model and 2) scaling up this model in a way that balances increasing capacity with maintaining quality. As with primary literacy, many (though not all) of the design elements of a high quality prekindergarten model are known.²⁵² The Lab District's job will be to assemble the best model or models for the New York City context. It will then test out and refine the model(s) in a representative group of schools. Once a model is determined to produce strong outcomes in these schools, it will be scaled up through a larger group of schools (where further refinement of instructional programs and practices will take place) and in additional stages throughout the City. The Lab District, in conjunction with the Institute, will

also conduct ongoing work into areas of early childhood education in which less is known, including how to develop assessments of ‘readiness to learn’.

Finally, the Lab District will also develop the under-three pilot programs recommended by the Commission. Enrollment will be limited to 75 children per pilot (with a limit of five pilots). This makes them small enough to carefully manage for quality, but large enough to make an impact in targeted neighborhoods and to provide the data necessary for proper evaluation of that impact on children and their families. One model the Lab District might test out is Early Head Start, which provides a comprehensive blueprint of services for children under the age of three.²⁵³ Early Head Start programs generally include family support services as well as full day care options that provide developmental opportunities for young children.²⁵⁴ The City’s Department of Health will be an active partner in these pilots, with the goal of improving its current regulations and oversight of early learning settings for children under the age of three.

RECOMMENDATION 3

Develop a coherent human resources system for early childhood programs, to attract and retain quality teachers and administrators, by bringing the salaries of UPK teachers and directors in CBOs more in line with those of UPK teachers and principals in public schools. Link increased compensation to assessments to screen and evaluate performance, and provide teachers and administrators with professional development to increase skills and knowledge.

Specifics

- Increase salaries of UPK teachers in CBOs from their current average of \$36,500 to \$44,000, to make them more comparable to those of UPK teachers in public schools.²⁵⁵ Provide salary increases only to those teachers who pass the rigorous assessments outlined in part one of the Commission’s report to ensure quality teaching for children in early childhood programs.
- Increase salaries of UPK directors in CBOs from their current average of \$71,000 to \$85,200, to make them more comparable to those of UPK principals in the public schools. Provide salary increases only to those directors who pass rigorous assessments to ensure quality administration of early childhood programs. (Costing out Pending)
- Provide incentives, during the expansion phase, to recruit more teachers and administrators to the field and to help those already in the field to complete their certification. Incentives should include loan forgiveness, scholarships, and release time to attend classes. The City might also consider the creation of a pool of substitute teachers to fill in for teachers who must take time off work to attend classes for certification.
- Provide a minimum of 60 hours per year of high quality, in-service professional development, training, mentoring, seminars and/or conferences for CBO and UPK teachers and administrators. Professional development that is delivered on an on-going basis could include the following
 - Knowledge of child development;

- Design of the learning environment;
- Curriculum design and assessment;
- Classroom management;
- Emergent literacy;
- Problem solving;
- Social and emotional competence;
- Observation and appropriate assessment;
- Cultural competence;
- Techniques for enhancing language development;
- Family and community involvement.

Recruiting and Retaining Quality Teachers and Administrators

The greatest challenge to the expansion of prekindergarten access for three and four-year-olds is the recruitment, training and compensation of a sufficient number of qualified teachers and administrators.

In recent years, the demands placed on teachers interested in early education have greatly increased. As of February 2, 2004, students seeking to teach in early childhood education (birth to Grade 2) must now have *initial certification*, which requires not only a bachelor's degree but also student teaching experience and passing three state certification exams. To continue in the field, a teacher must complete the *professional certification* requirements within five years. These requirements include the completion of a Master's degree, three years of teaching experience and passing additional state certification tests. Fully certified teachers must also complete 175 hours of professional development every five years.

In addition, New York City is the only place in the country that requires all early childhood programs in the community to have a certified teacher at the head of every classroom, a standard that was also adopted by the Universal Prekindergarten program. CBOs face challenges in meeting this requirement, however, because they cannot pay the salaries necessary to recruit and retain individuals with the appropriate credentials. The DOE, for example, reports that only 76 percent of the teachers in prekindergarten classrooms are certified, though many early childhood programs have head teachers on study plans moving toward certification.²⁵⁶

Certified teachers currently can earn substantially more and receive more comprehensive benefits in the public school system than in CBOs. Indeed, it is not an exaggeration to say that New York City currently has a two-tiered system of preschool, with teachers in CBOs earning substantially less than their peers in public schools. The current funding mechanism for UPK fails to address this disparity, which is likely to grow more severe in the coming years, as demand for early education services grows.

An examination of the current pay scales reveals the extent of the problem. Salaries for teachers in CBOs range from \$28,000 to \$45,000 per year, with most falling in the lower part of the salary range. After ten years, a teacher in a child care center funded by the Administration

for Children's Services is likely to earn half as much as public school teachers with the same credentials and seniority.²⁵⁷ The problem is even more acute for programs that rely primarily on parent fees rather than public funds to cover the costs of a full-school day or an extended day.

Not only is there a disparity in the salary and benefits provided to teachers in CBOs as compared to public schools, there is also substantial disparity in the professional development opportunities available to the prekindergarten teachers in CBOs as compared to public schools. Academic institutions recommend a minimum of 60 hours of professional development annually, and New York City public school teachers receive at minimum this amount. The opportunities for teachers in CBOs are substantially less, and vary depending on a number of factors, including the program's resources and other funding requirements. While at least one Region in the City's school system currently provides the same development opportunities to all prekindergarten staff, regardless of setting, this is the exception to the rule.

Research confirms that preschool teacher quality is strongly linked to compensation; poor compensation contributes to high turnover, which in turn harms educational quality.²⁵⁸ A qualified teacher, as measured by education, knowledge of child development, and ability to support the learning of children from multiple backgrounds, is essential if a child is to receive full benefit from his/her prekindergarten experience. As documented by the National Institute for Early Education Research, better-educated teachers with specialized training are more effective than those who lack such training and education.²⁵⁹

Quality prekindergarten also requires recruiting, training, and properly compensating administrators to oversee these programs and their staff. While it is principals who administer prekindergarten programs in public schools, and often serve as the principal for the building during school hours, those who run prekindergarten programs in CBOS hold the title of director. For this position, the City requires a Masters in Education, a BA in Early Childhood Education (or Special Education for those programs specifically), a New York State Teaching Certificate in Early Childhood or Elementary Education, and two years of classroom and paid experience as a Group Teacher in a licensed pre-school program.²⁶⁰ Salaries for directors in CBOs range from \$42,737 to \$100,000 per year, with most falling in the lower part of the salary range. These directors, in addition to running the CBO prekindergarten program, also run the Early Childhood Centers in which the programs are located. Directors spend approximately 40 percent of their workday managing the prekindergarten programs within their CBOs.

As with teachers, a high turnover rate also exists for directors of prekindergarten programs: since 2002, the City has lost 209 of its 450 daycare directors and assistant directors, an almost 50 percent attrition rate in less than four years.²⁶¹ This loss and failure to retain and train staff to become experienced professionals thwarts the City's ability to establish ongoing, high-quality prekindergarten programs. Making prekindergarten programs an educational priority requires encouraging those who run them to remain in the system, continually assisting them in improving their skills, and valuing them as quality professionals.

In order to ensure that meaningful teaching and learning occurs at the prekindergarten level, valid and reliable assessments of children's growth must regularly take place, and teachers must be trained in the use of these assessments. Principals and Directors, in turn, must be trained

to oversee and assist these teachers. At the prekindergarten level, the primary purpose of assessments is to help educators to teach more effectively and to determine appropriate classroom activities for both groups of as well as individual children. These assessments can be used to tailor teachers' professional development more closely to the needs of students. They can also be used to develop understanding of the child's growth, provide information for instructional planning, and facilitate communication with the child's family.²⁶² By examining individual classroom data and aggregate regional data, regions can finely tune their professional development to student and teacher needs. There are a number of national assessments available, such as those used by the Early Head Start program, that examine multiple dimensions of child development and learning as well as the conditions that support them.

The DOE should work to provide professional development and technical assistance in all settings to ensure that staff conducts and uses assessments of children's progress, employs quality instructional strategies, participates in professional development programming informed by assessment information, and maintains classroom standards. These services can be provided directly through newly hired curriculum and program specialists or through contracts to professional and research organizations as needed.

RECOMMENDATION 4

Coordinate an approach to the administration of UPK that streamlines funding, standards, and reporting requirements.

Specifics

- Create, through the Mayor's Office, an interagency structure to coordinate the various agencies involved in the provision of prekindergarten services. This body will work with/include representatives of: the Department of Education, the Administration for Children's Services, the Human Resources Administration and the Department of Health and Mental Health. This coordinating body will be charged with addressing the contradictory and duplicate requirements for program standards, funding, reporting, enrollment of children and technical supports to programs. Issues this administrative body might examine include:
 - Providing data on the ages of children enrolled across all settings, the location of services and detailed assessments of unmet need based on current population figures;
 - Conducting a comprehensive needs analysis;
 - Integrating and coordinating funding streams;
 - Unifying the contracting, reporting and auditing procedures across all sectors to maximize the use of public dollars;
 - Developing plans for program and staff expansion until full enrollment is reached;
 - Developing uniform tools for evaluating program quality and the progress of individual children;

- Working collaboratively with the Citywide UPK Advisory Board and the ACS Advisory Board already in place as well as newly developed community-based advisory boards in the planning and implementation process.
- Ensure, through the Mayor’s office, that the necessary operational infrastructure is in place to provide technical assistance, monitoring and other support services (e.g. early education specialists, social workers, nurses and family workers) to organizations providing early education services.
- Establish ongoing local advisory boards in each community school district to provide coordinated planning for local communities’ UPK programs. These advisory boards should include individuals representing DOE regional and district staff, Community District Education Councils, public school principals, CBO directors, representatives from higher education, researchers, advocates and civic leaders as well as parents. The creation of these boards will give all stakeholders a voice in the UPK planning and implementation process at both the City and community levels.*

* The 1997 law that established universal prekindergarten services called for advisory boards in every school district to plan for the UPK program. These advisory boards were to include representatives of all important stakeholders, from educators to parents. The law did not, however, make provisions for ongoing advisory boards to support and help implement additional programs.

ASSUMPTIONS AND COSTS FOR UNIVERSAL PREKINDERGARTEN

We use a program budget based on currently negotiated entry-level salaries for certified teachers in public schools in New York City. In this model, the estimated cost per child for a full day of PreK for a three-year-old and four-year-old child, respectively, is \$12,028 and \$10,024. A detailed analysis of the costs is provided below.

The total cost of moving toward a universally accessible system is based on certain core assumptions about the number of children who would actually enroll and the costs of providing services to them. We are assuming that, at full enrollment, the system would serve 64,000 out of roughly 110,000 four-year-olds on a voluntary basis, and 55,000 out of 110,000 three-year-olds, also on a voluntary basis. The rationale for this assumption is based on the 20-year experience with full day kindergarten that now enrolls close to 64,000 of the five year olds in the City. Each year there is on average 110,000 children who are born or whose parents migrate to New York City. The number stays fairly constant for each year. The lower assumption of full enrollment for three-year-olds as compared to four-year-olds is that we expect fewer parents will enroll their children in formal education programs.

Of the 42,000 four-year-olds currently enrolled in DOE-sponsored UPK, the DOE reports that 80percent (33,600) are enrolled in part-day PreK services and 20percent (8,400) are in full day PreK services.

Funding needs

Expansion cannot begin without first bringing the CBO rate per child for a half day program up to the median cost of \$5,012 from the current average of \$3,300. Given the 27,000 children currently being served in CBOs, this entails a rate increase of approximately \$1,700 per child or \$45.9 million in total. This cost must be met even if the seats were to be shuttled to the public schools from CBOs. In fact, continuing the services in CBOs maintains the additional seating capacity without new facilities costs and preserves the range of services that parents require.

To add new children will require expanding the 33,600 existing half-day slots for four-year-olds to full day and adding an additional 22,000 full-day slots for four-year-olds. For three-year-olds, it will entail adding 19,150 full-day slots.

Assumptions

Adjust rate per child rate in CBOs	27,000 x \$1,700	\$ 45.9 million
Expand half day four-year-olds	33,600 x \$5,012	\$ 168.4 million
Add new full day four-year-olds	22,000 x \$10,024	\$ 220.5 million
Add full day three-year-olds	19,150 x \$12,028	\$ 225.1 million
Total		\$659.9 million

A cost estimate for universal preschool for three-year-olds (half-day) and four-year-olds (full day) is based on the following assumptions:

- Full enrollment: Four-year-olds = 64,000 children (of 110,000 four-year-olds). Three-year-olds = 55,000 (50 percent of 110,000) of whom 19,150 are eligible.
- 60 percent of the three-and four-year-old children will enroll in CBO settings and 40 percent in public school settings.
- There will be some cost differentials between the CBOs and public schools but these are not significant because this proposal is based on comparable teacher salaries and director/principal salaries.

Entry level Annual Salary Public School	
Kindergarten Teacher	\$44,090
Public School Asst. Teacher	\$26,100
Public School Principal	\$105,100
Family/Child Social Worker	\$55,515
Instructional Coordinator	\$50,150

Estimated Costs: New York City Full Day PreKindergarten⁴⁷⁴			
			Annual Expense
0.4 (FTE)	Principal/Director	\$105,100	\$42,040
1	Other professional staff	\$50,150	\$50,150
6	Teachers	\$44,090	\$264,540
6	Teachers Assistants	\$26,100	\$156,600
1	Family Resource (MSW)	\$55,515	\$55,515
	Subtotal salaries		\$568,845
	Benefits @ 35% salary		\$199,095
	Substitute teacher daily rate	\$85	\$20,400
	<i>Non-personnel /FTE child</i>	\$2,725 ⁴⁷⁵	\$294,300
	Total		\$1,082,640
	Cost/child full day for 4 year olds (18/class)		\$10,024
	Cost / child half day 4 year olds		\$ 5,012
	Cost / child full day for 3 year olds (15/class)		\$12028
	Cost/ child half day 3 year olds		\$6014

INVESTMENT IN FACILITIES FOR UNIVERSAL PREKINDERGARTEN

The numbers below are based on the take up rate as outlined above. It is expected that 63,938 four-year-olds will enroll in full day and 19,150 three-year-olds will be eligible for and enrolled in full day services.

Seats needed for 4 year olds	63,938
Seats needed for 3 year old	19,150
TOTAL SEATS NEEDED	83,088

It is not reasonable to assume that every slot would be used for this program

Total seats for 3 and 4 year olds	64,852
Program not able to participate ⁴⁷⁶	(10,376)
Programs not interested	(6,485)
TOTAL SEATS AVAILABLE FOR PreK	47,990

Capacity in community for 3 and 4 year old	47,990
Capacity in schools	15,404
Other potential capacity in schools	500
TOTAL CAPACITY	63,894

Even assuming that every single licensed space can be incorporated into the universal prekindergarten program, 19,194 spaces will need to be created to accommodate every three-and four-year-old who would like to participate in the program.

Total Seats needed	83,088
Current seat capacity	63,894
SLOTS NEEDED	19,194

In thinking about the cost to develop 19,194 new slots, it is important to take into consideration the requirements for the design of the facility. Basic considerations can be found in Department of Health and Mental Hygiene (DOHMH) licensing guidelines:

- 30 square feet of usable space per child
- No more than 15 three-year-olds in each room
- No more than 20 four-year-olds in each room
- 1 sink and 1 toilet for every 15 children
- Access to adequate outdoor space

While DOHMH sets the minimum guidelines for space, the National Association for the Education of Young Children (NAEYC) sets higher standards for higher quality in programs:

- 50 square feet of usable space per child
- 100 square feet of outdoor usable space

In practice, a center should have at least the following in addition to classrooms and bathrooms:

- Reception area
- Staff lounge
- Parent lounge/resource center
- Adequate office space for teaching and administrative staff
- Adequate storage throughout the center

It is estimated that 40 percent of the seats needed for the pre-k program will be housed in public schools. The remaining 60 percent will be in community-based settings. Schools and centers that allow a *minimum* 75 square feet per child should be able to accommodate facilities design that allows for ample space for children, parents, and staff in the center.⁴⁷⁷

CBO SQUARE FOOTAGE	
Min square ft for quality	75
# spaces needed	<u>11,516</u>
Amt Sq. ft. to be developed	863,712

Better design for early childhood space requires closer to 105 square feet per child. Therefore, New York City needs to develop between 806,131 – 863,712 square feet of space to accommodate the demand.

SCHOOL SQUARE FOOTAGE	
Min square ft for quality	105
# spaces needed	<u>7,677</u>
Amt Sq. ft. to be developed	806,131

In a survey administered to nonprofit organizations that have developed childcare center spaces over the past five years, the range of cost for childcare center construction was between \$125-\$350 per square foot.⁴⁷⁸ The average price was \$200 per square foot. However, construction costs have risen significantly in the few years since this survey was administered, and a best estimate of construction per square foot for early childhood space is now closer to \$257 per square foot. Because large space is extraordinarily difficult to secure for early childhood settings in the community, the minimum of 75 square feet per child has been allocated to community-based settings. Approximately 864,000 square feet of space needs to be developed in community settings to accommodate the children who want to enroll in the prekindergarten program. Hence, \$221.9 million will be needed to develop seats in community settings.

COST – Community Setting	
Min square ft for quality	75
# spaces needed	11,516
Amt Sq. ft. to be developed	863,712
Sq. footage in community settings	863,712
Avg. TDC per sq ft	\$257
Total development cost TDC	\$221,973,949

Before calculating the cost of adding new seats to the public schools, it was important first to assess whether there were any available seats in the public schools for the expansion of the prekindergarten program and where these seats were before calculating the cost of building additional new seats. An analysis was done of the prekindergarten seat need for each district. The current space needs and the future space needs in 2008 for this program were calculated based on the number of projected three- and four-year olds in each district, and the number of targeted, high-need students. Based on the costs in the Campaign for Fiscal Equity’s facilities proposal, the per seat cost for prekindergarten space is approximately \$58,400 per child (2003). With an estimate of 7, 677 children in school settings or a total estimated cost of \$448.3 million.

Another option worthy of exploration is for the school system to acquire long-term leases to property or facilities where additional space for prekindergarten students would be constructed and then lease back this space to CBOs to operate the program. The school system would retain title for the improvements via the lease, obviating any need for any payments to defray CBO rental or mortgage costs. Improvements then could be financed via sales of tax-exempt bonds.

The Commission's third, and final, report on the topic of facilities provides further details.

²⁰⁹ Hiebert, Gallimore and Stigler, 2002: 13.

²¹⁰ Amy Gerstein, "Framing a Conversation About Taking Social Innovations to Scale: Considerations for Reformers and Funders," January 2002. Accessed 9/10/05 from <http://www.noycefdn.org/documents/scalingup.pdf>.

²¹¹ Southern Regional Education Board, "Summer School: Unfulfilled Promise," Atlanta, GA: 2002.

²¹² Bill Metzker, "ERIC Digest: School Calendars," 2003. Accessed 1/1/05 from <http://www.ericdigests.org/2003-2/calendars.html>.

²¹³ Southern Regional Education Board, 2002.

²¹⁴ Gerstein, 2002.

²¹⁵ James Spillane and Charles L. Thompson, "Reconstructing conceptions of local capacity: the local education agency's capacity for ambitious instructional reform," *Educational Evaluation and Policy Analysis*, Vol. 2 (Summer 1997): 185-203.

²¹⁶ Spillane and Thompson, 1997.

²¹⁷ Spillane and Thompson, 1997.

²¹⁸ Elmore, 1996.

²¹⁹ Spillane and Thompson, 1997.

²²⁰ Gallimore, 2002: 9.

²²¹ RAND Mathematics Study Panel, 2003: 64.

²²² Lagemann, 2005: 16.

Early Education for All Children

²²³ J. Shonkoff and D. Phillips, eds., *From Neurons to Neighborhoods: the Science of Early Childhood Development* (Washington, DC: National Academy Press, 2002).

²²⁴ J. Shonkoff and D. Phillips, eds. op cit. See also N. Halfon, E. Shulman and M. Hochstein, *Brain Development in Early Childhood: Building Community Systems for Young Children* (UCLA: Center for Healthier Children, Families and Communities, August 2001).

²²⁵ See *Abbott v. Burke*, 153 N.J. 480 (1998) (Abbott V). See clerk's syllabus, summary and excerpts at www.edlawcenter.org/ELCPublic/Publications/PDF/AcrobatAbbott_V.pdf for comprehensive discussion of research on literacy and language gap between low-income children without any preschool experience and their more affluent peers. Also, W.S Barnett, J.E. Tarr, C.E. Lamy, and E.C. Frede, *Fragile Lives, Shattered Dreams: A Report on Implementation of Preschool Education in New Jersey's Abbott Districts* (New Brunswick: N.J: Center for Early Education Research, 2001).

²²⁶ Leonard Masse and Steven Barnett, *A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention*. (The National Association for Early Education Research).

²²⁷ L. J. Schweinhart, J. Montie, Z. Xiang, W. S Barnett, C. R. Belfield and M. Nores, *Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40* (Ypsilanti, MI: High/Scope Press, 2005).

⁹ Targeted PreK was the precursor to Universal PreK. It was formerly called Experimental PreK. Still in existence, it provides a full six-hour day to 5,500 high-need children in the City. The program receives \$50 million per year.

²²⁹ New York State Education Department *Experimental PreK Evaluation*, 1982 and New York State Board of Regents *Study on Cost Effectiveness in Education*.

²³⁰ Clive Belfield, "Early Childhood Education: How Important are the Cost- Savings to the School System?" Clive R. Belfield, Teachers College, Columbia University, February 2004. See www.WinningbeginningsNY

²³¹ Karen Schulman and Steven W. Barnett. *The Benefits of PreKindergarten for Middle-Income Children* (New Brunswick, NJ: National Institute for Early Education Research, March 2005).

²³² Joel Klein, Testimony before the Joint Budget Committee, New York Legislature, Albany, NY, 2003

²³³ W. S. Barnett, J.W. Young & L. J Schweinhart, "How preschool education influences long-term cognitive development and school success: A causal model," in W. S. Barnett & S. S. Boocock (Eds.), *Early care and education for children in poverty: Promises, programs, and long-term results*, (Albany, NY: SUNY Press, 1998). pp. 167-184.

²³⁴ See the Zero to Three Website, www.zerotothree.org, for extensive links to research on development during the early years. *Building Bridges from PreKindergarten to Infants and Toddlers* explores the growing concern among scientists and public policymakers that many preschoolers need intervention before they arrive in preschool. This research demonstrates that intervention before the age of three can catch developmental lags before they grow more costly and complicated to treat.

-
- ²³⁵ Anne Mitchell, “The State with Two PreKindergarten Programs: A Look at PreKindergarten Education in New York State (1928-2003),” (Early Childhood Policy Research: Climax, NY 12042): June 2004.
- ²³⁶ The only exception was for children already enrolled in the Targeted PreKindergarten program who were considered already served and children receiving a full day of special education services.
- ²³⁷ The picture is quite complex because most families must pay for these services. Those that receive free or reduced price services must meet stiff eligibility standards based on income and work participation. The funding is limited and many families remain on waiting lists to access these services. According to the ACS for example, there are more than 20,000 families on a waiting list for child care subsidies.
- ²³⁸ Charts created by Child Care Inc. are based on 2003 data from the DOE, ACS, HRA, Head Start and CUNY.
- ²³⁹ Child Care, Inc., “Bringing It All Together: Collaboration, Partnership, and Blended Funding Strategies for Strengthening Early Learning Programs in New York City” September 2003. Available at www.unitedwaynyc.org.
- ²⁴⁰ Betty Holcomb, “Case Study: Public Preschool in New Jersey Is One Roadmap to Quality.” NIEER, New Brunswick, June, 2004. www.nieer.org
- ²⁴¹ See Testimony of Moncrieff Cochran, Professor Cornell University – City Council Hearings on the CFE. See <http://www.ecsgnyc.org/pubs.html> For additional reports on his assessments of UPK in New York State, see <http://www.human.cornell.edu/units/hd/cecp/publications.html>
- ²⁴² Information Request, Council of the City of New York Education Committee Hearing, January 27, 2005 submitted by The New York City Department of Education, Office of Early Childhood Education.
- ²⁴³ DOE testimony, New York City Council. January 27, 2005.
- ²⁴⁴ Informal polls conducted by the CBO Network, a network of community-based UPK providers in NYC.
- ²⁴⁵ It is difficult to determine an accurate, unduplicated count of children who attend preschool programs in New York City today because they are counted by funding stream and many children benefit from more than one funding stream. For example, the same four-year-old child might be counted twice, as a Head Start and a UPK student even though they may be receiving services at the same site, UPK in the morning and Head Start in the afternoon. It is equally difficult to analyze the population by age or to determine how many children attend half-day versus full-day programs, because the counts of children are not kept in that manner.
- ²⁴⁶ With more than 20 years of experience in New York City with full day kindergarten, it is reasonable to project that utilization by families will be similar to that for full day kindergarten for four-year-olds. With less experience with three-year-olds, it is assumed that the enrollment will be slightly lower.
- ²⁴⁷ This is assuming a full PreK enrollment rate of 64,000 four-year-olds, which is similar to the average enrollment rate for kindergarten in the public schools.
- ²⁴⁸ S. Ryan, A. Hornbeck. & E. Frede, “Mentoring for Quality Improvement: A Case Study of a Mentor Teacher in the Reform Process. New Brunswick, NJ: National Institute for Early Education Research, 2004. Also, by same authors, “Mentoring for Change: A Time Use Study of Teacher Consultants in Preschool Reform. In *Early Childhood Research and Practice*, 6 (1), June 2004.
- ²⁴⁹ The dimensions include physical well-being and motor development; cognitive development; mathematical thinking; creative and aesthetic development; scientific thinking; and social and emotional development. See Sharon Kagan, , Evelyn Moore, & Sue Bredekamp, , “Reconsidering Children’s Early Development and Learning: Toward Common Views and Vocabulary,” Washington, DC: National Education Goals Panel, 1995.
- ²⁵⁰ New York City Department of Education, Office of Early Childhood Education, “The PreKindergarten Performance Standards” 2003.
- ²⁵¹ New York City Department of Education, Office of Early Childhood Education, “The PreKindergarten Performance Standards,” 2003.
- ²⁵² For more on what research needs to be done on the issue of prekindergarten program quality, see Anthony Raden and Lisa McCabe, *Researching Universal Prekindergarten: Thoughts on Critical Questions and Research Domains from Policy Makers, Child Advocates and Researchers*, 2004.
- ²⁵³ “Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start” U.S. Department of Health and Human Services, 2002. This report and others with similar findings are available at http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html . Also see <http://www.mathematica-mpr.com/3rdLevel/ehstoc.htm>.
- ²⁵⁴ Ibid.
- ²⁵⁵ Providing teachers in the 1,500 existing CBO classrooms with salaries comparable to UPK public school teachers will require an increase of \$12.6 million. Salaries were adjusted from an average of \$35,600 to \$44,000, representing a 20 percent increase. There are 27,000 children enrolled in CBOs. This represents 1,500 classrooms (27,000/ 18= 1,500). To offer comparable benefits across the system will require an increase of \$5.25 million (\$4.4

million for pensions at 35 percent of salary, plus \$850,500 for FICA at 6.75% of salary) The \$5.25 million represents the change in investment for pensions and FICA after adjusting for the new salary increase.

²⁵⁶ Interview with Eleanor Greig-Ukoli, March 2005.

²⁵⁷ Conversations with CBO directors, assessment of UFT salaries and day care worker salaries as negotiated by Local 1707.

²⁵⁸ W.S. Barnett, "Low Wages = Low Quality: Solving the Real Preschool Teacher Crisis" *Policy Brief*. New Brunswick: National Institute for Early Education Research, May 2003.

²⁵⁹ W.S. Barnett, "Better Teachers, Better Preschools: Student Achievement Linked to Teacher Qualifications," *Preschool Policy Matters*, Issue 2, revised December, 2004.

²⁶⁰ New York City Administration for Children's Services Agency for Child Development Pre-School Programs Staff Qualification Guide based on New York City health Code Art. 47.13 (a) as of June 1997.

²⁶¹ Email correspondence with Richard Relkin, Council of School Supervisors and Administrators, October 11, 2005. In 2002, 48 directors and assistant directors left the system; 58 left in 2003; 59 in 2004 and 44 in 2005 as of October 11, 2005.

²⁶² "A Rising Tide: Classroom Quality and Language Skills in the Abbott Preschool Program", New Jersey Department of Education and The College of New Jersey, September 2004.

Leadership

²⁶³ See Education Committee of the States, <http://www.ecs.org/html/issue.asp?issueid=158&subIssueID=97>, for additional information on leadership, recruitment and retention.

²⁶⁴ Kenneth Leithwood and Carolyn Riehl, "What Do We Already Know About School Leadership?," *New Directions for Research in Educational Leadership*, eds. Carolyn Riehl and W. Firestone (New York: Teachers College Press, 2006; in press).

²⁶⁵ Cynthia Prince, "The challenge of attracting good teachers and principals to struggling schools," Arlington, VA: American Association of School Administrators, 21.

²⁶⁶ "Keeping Quality Teachers: The Art of Retaining General and Special Education Teachers," Northeast Regional Resource Center, Williston, VT, 2004. Accessed 06/27/05 from <http://www.wested.org/nerrc/Acrobat%20Files/KeepingQualityTeachersIntro.pdf>.

²⁶⁷ M. Taschannen-Moran and M. Barr, "Fostering Student Learning: The Relationship of Collective Teacher Efficacy and Student Achievement," *Leadership and Policy in Schools*, Vol. 3, No. 3, 2004: 189-209.

²⁶⁸ Taschannen-Moran and Barr, 2004.

²⁶⁹ Leithwood and Riehl, in press: 6.

²⁷⁰ Richard F. Elmore, "Building a New Structure for School Leadership," The Albert Shanker Institute, Winter 2000: 13.

²⁷¹ Frank Papa, Hamilton Lankford and James Wyckoff, "The Attributes and Career Paths of Principals: Implications for Improving Policy," University at Albany, SUNY, Albany, NY, 2002.

²⁷² Marguerite Roza, et al. "A Matter of Definition: Is There Truly a Shortage of School Principals?," Center on Reinventing Public Education, University of Washington, Seattle, WA, 2003: 34.

²⁷³ P. Hallinger and R. Heck, "The Principal's Role in School Effectiveness: An Assessment of Methodological Progress, 1980-1995," in *International Handbook of Leadership and Administration*, K. Leithwood, et al, eds. (The Netherlands, Kluwer Academic Publishers, 1996): 723-783.

²⁷⁴ Leithwood & Riehl, in press: 43.

²⁷⁵ K. Leithwood, K. Seashore-Louis, S. Anderson and K. Wahlstrom, "How Leadership Influences Student Learning," Center for Applied Research and Educational Improvement & Ontario Institute for Studies in Education, 2004; American Youth Policy Forum, *Raising Minority Academic Achievement: A Compendium of Education Programs and Practices*, Washington, D.C., 2001; Hallinger & Heck, 1996.

²⁷⁶ Lynette Holloway, "Increasingly, the Principal is a Newcomer," *New York Times* October 2, 2001.

²⁷⁷ Conversation with Ernest Logan and Peter McNally, Council of School Supervisors and Administrators, June 27th, 2005.

²⁷⁸ See Education Committee of the States < <http://www.ecs.org/html/issue.asp?issueid=158&subIssueID=97>> for info on leadership, recruitment and retention

²⁷⁹ Papa, Lankford and Wyckoff, 2002: 14.

²⁸⁰ Roza, et al., 2003: 34.

²⁸¹ Roza, et al, 2003: 31.

Comprehensive Student Supports

⁴⁵² Citizens' Committee for Children of New York, Inc., "Keeping Track of New York City's Children," New York, 2005.

⁴⁵³ Citizens' Committee for Children, 2005.

⁴⁵⁴ Citizens' Committee for Children, 2005.

⁴⁵⁵ National Association of Social Workers, *Currents*, New York City Chapter, May 2004.

⁴⁵⁶ Mayer, 1995; McNeely, 2002.

⁴⁵⁷ E. Greenburg, D. Skidmore, D. Rhodes, and Nesbitt, "NAEP Policy Report: Climates for Learning: Mathematics Achievement and Its Relationship to School wide Student Behavior, School wide Parental Involvement, and School wide Morale," (Washington, D.C.: National Center for Education Statistics, US Department of Education, 2001).

⁴⁵⁸ M.D. Resnick, et al. "Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health," *Journal of the American Medical Association* Vol. 278, No. 10, 1998: 823-832.

⁴⁵⁹ D. Osher, K. Dwyer & S. Jimmerson, *Safe, Supportive and Effective Schools: Promoting School Success to Reduce School Violence* (New Jersey: Lawrence Erlbaum Associates, Inc.; in press).

⁴⁶⁰ Osher, Dwyer and Jimmerson, in press.

⁴⁶¹ Robin Stern, "Social and Emotional Learning: What is It? How can we use it to help our children?" NYU Child Study Center, New York. Dr. Peter Salovey from Yale University and Dr. John Mayer from the University of New Hampshire coined the term emotional intelligence. In 1995, Daniel Goldman, the leading expert in the field brought the concept into the mainstream in his book *Emotional Intelligence*.

⁴⁶² Robin Stern, "Social and Emotional Learning".

⁴⁶³ Ibid.

⁴⁶⁴ Sullivan and Vorsanger, "Understanding Adolescent Violence: An Ethnographic Approach", Vera Institute of Justice, 1999; Snyder and Sickmund, "Juvenile offenders and Victims: 1999 National Report," Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, 1999.

⁴⁶⁵ Mayer 1995; McNeely 2002.

⁴⁶⁶ Colvin, Walker, & Ramsey, 1993.

⁴⁶⁷ Mayer 1995; McNeely 2002.

⁴⁶⁸ Colvin, Walker, & Ramsey, 1993.

⁴⁶⁹ Osher, Dwyer and Jimerson, in press.

⁴⁷⁰ Osher, Dwyer and Jimerson, in press. M.M. Quinn, D. Osher, C.C. Hoffman, and T.V. Hanley, *Safe, drug-free, and effective schools for ALL students: What Works!* (Washington, DC: Center for Effective Collaboration and Practice, American Institutes for Research, 1998).

⁴⁷¹ Osher, Dwyer and Jimerson, in press.

⁴⁷² "Every Child Learning: Safe and Supportive Schools," Learning First Alliance, November 2001.

⁴⁷³ Learning First Alliance, November 2001.

Assumptions and Costs for Universal Prekindergarten

⁴⁷⁴ Similar child costs are assumed for three and four- year-olds.

⁴⁷⁵ Estimate includes costs such as: facilities, food, maintenance and repair, rent, supplies, telephones, postage, and insurance. Costs will vary depending on location.

⁴⁷⁶ According to the "Cost, Quality, and Child Outcomes Study" (University of Colorado-Denver, 1995), 10 percent of 400 preschools studied were found to be of "poor" quality. These programs will be unable to meet the high standards required to participate in the UPK program, and therefore the slots they provide should not be included. Only 24 percent of preschools were found to be of "good" or "excellent" quality. Therefore the remaining 66 percent of programs will need to raise the quality of care they provide to participate. Many of these will be able to do so with extensive technical assistance, but at least 6 percent will never be able to meet the quality requirements for a variety of reasons, and those slots should not be counted toward capacity. Finally, "exclusive" preschools will be unlikely to opt into the program, so another 10 percent of slots have been removed from the capacity count.

⁴⁷⁷ Susan Muenchow, "Suggested Standards for Preschool for All Facilities," American Institutes for Research, 2004.

⁴⁷⁸ Low Income Investment Fund, 2002.